First Named Inventor: Shusaku Shibasaki Application No.: 10/521,539

REMARKS

This Amendment is in response to the non-final Office Action mailed December 1, 2009, in which all of the pending claims (1-10) were rejected. With this Amendment, claims 8 and 10 are canceled without prejudice, claims 11-17 are added, and claims 1, 4 and 9 are amended. Claims 1-7, 9, and 11-17 are presented for reconsideration and allowance.

Claims 1-6 and 8-10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Fry (U.S. Pat. No. 835,157) in view of Wilson (U.S. Pat. No. 1,751,261). Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Fry '157 in view of Wilson '261, and in further view of Hongo (U.S. Pat. No. 5,370,207). With this amendment, the element previously presented in claims 8 and 10 (now canceled) is incorporated into claim 1, and claims 4 and 9 are amended for clarity. Claims 11-17 are added, but present no new matter as they are derived from previously presented claims 1-7 and 9. Amended independent claim 1 requires the thickness of the innermost coil varies so as to create a substantially flat top contact surface, and new independent claim 11 requires the thickness of the outermost coil varies so as to create a substantially flat bottom contact surface, neither of which is taught or suggested by any of the references of record.

Fry '157 discloses a combined cupboard and dumb-waiter including vertically moving cabinet 8 and "normally compressed actuating-spring 11, on which the cabinet [8] rests when in the depressed condition within the shaft 5." Fry '157, col.1, Il. 45 – col. 2, Il. 59; FIG. 4. In other words, Fry's spring 11 is compressed during normal use of moving cabinet 8. Claims 1 and 11 require the buffer be contacted by the vertically moving member in the event of an abnormal overrun. Claims 1 and 11 further require that the thickness of the innermost/outermost coil varies so as to create a substantially flat top/bottom contact surface. In Fry '157, latching member or arm 22 extends from a bottom surface and above a top surface of spring 11 to contact the bottom surface of cabinet 8. Fry '157; FIG. 4. Fry '157 does not teach or suggest varying the thickness of the innermost/outermost coil to create a flat top/bottom contact surface.

Wilson '261 discloses a spring in the form of "a progressive helix or hollow cone, the convolutions of said helix being such that when the spring is axially compressed said convolutions will pass each other in adjacent relation but without contact, and when fully First Named Inventor: Shusaku Shibasaki Application No.: 10/521,539

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compressed such convolutions will lie in a common plan". Wilson '261, col. 1 ll. 7-14; FIGS. 1-4.

In Wilson '261, a stud having a hemispherical head 10 is attached to a top of surface of the spring for bearing against surface 6. Wilson '261, col. 6, II, 95-109; FIGS, 1-2. From FIG. 1 it is evident

that the coils 1-5 of Wilson '261 are substantially uniform in thickness. Accordingly, Wilson '261

teaches away from varying the thickness of the innermost coil to create a flat top contact surface as

required by claim 1 and silent regarding varying the thickness of the outermost coil to create a

bottom contact surface as required by claim 11.

Hongo '207 does not disclose the elements missing from a combination of Fry '157

and Wilson '261. Specifically, Hongo '207 is silent regarding the characteristics of the spring, let

alone varying the thickness of the innermost/outermost coil to create a flat top/bottom contact

surface as required by claims 1 and 11. No combination of Fry '157, Wilson '261, and Hongo '261 teaches or suggests all the elements of claim 1 or 11. Claims 1 and 11, as well as dependent claims

2-7, 9, and 11-17, are patentable over the references of record.

Conclusion

In view of the foregoing, all of the pending claims (1-7, 9, 11-17) are in a condition for

allowance. Notice to that effect is respectfully requested. The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No.

11-0982.

Respectfully submitted,

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